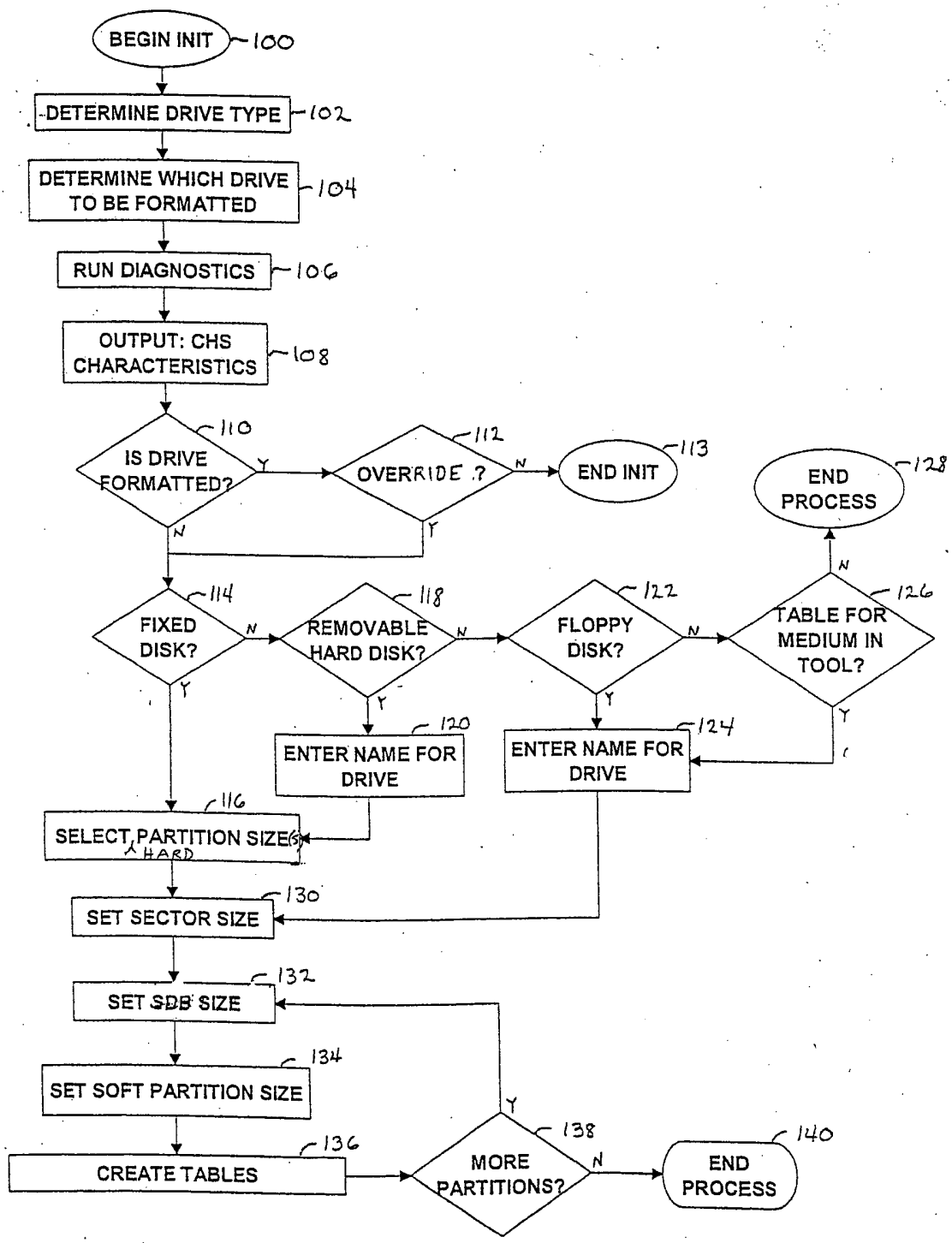
BEGIN INIT
100
DETERMINE DRIVE TYPE
102
DETERMINE WHICH DRIVE TO BE FORMATTED
104
RUN DIAGNOSTICS
106
OUTPUT: CHS CHARACTERISTICS
108
IS DRIVE FORMATTED?
110
Y
N
OVERRIDE ?
112
N
Y
END INIT
113
FIXED DISK?
114
N
Y
REMOVABLE HARD DISK?
118
N
Y
FLOPPY DISK?
122
N
Y
TABLE FOR MEDIUM IN TOOL?
126
N
Y
END PROCESS
128
ENTER NAME FOR DRIVE
120
ENTER NAME FOR DRIVE
124
SELECT PARTITION SIZE(S) HARD
116
SET SECTOR SIZE
130
SET SDB SIZE
132
SET SOFT PARTITION SIZE
134
CREATE TABLES
136
MORE PARTITIONS?
138
Y
N
END PROCESS
140

FIG. 1

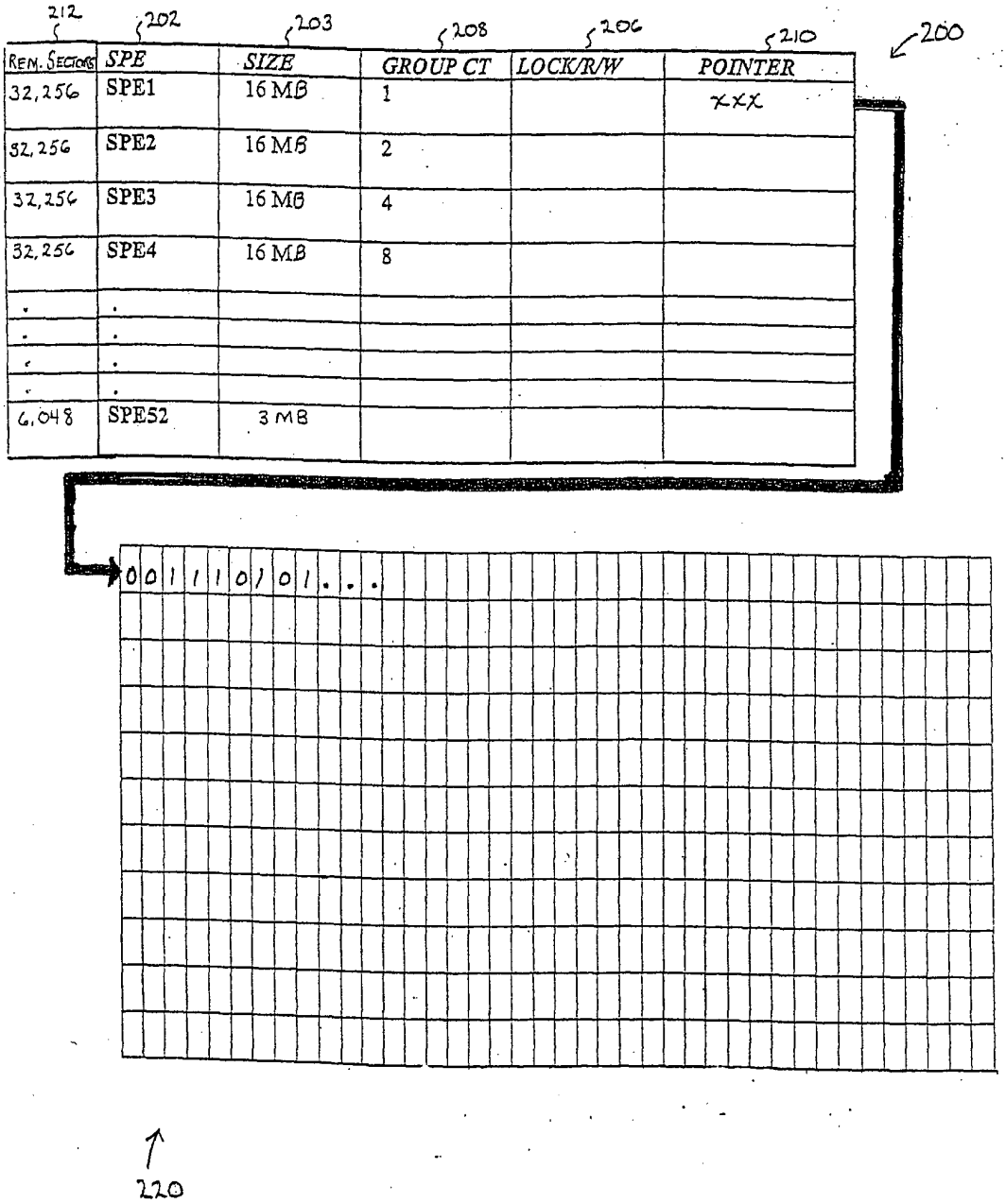
212
202
203
208
206
210
200
REM. SECTORS
SPE
SIZE
GROUP CT
LOCK/R/W
POINTER
32,256
SPE1
16 MB
1
XXX
32,256
SPE2
16 MB
2
32,256
SPE3
16 MB
4
32,256
SPE4
16 MB
8
6,048
SPE52
3 MB
0 0 1 1 1 0 1 0 1 . . .
220

FIG. 2

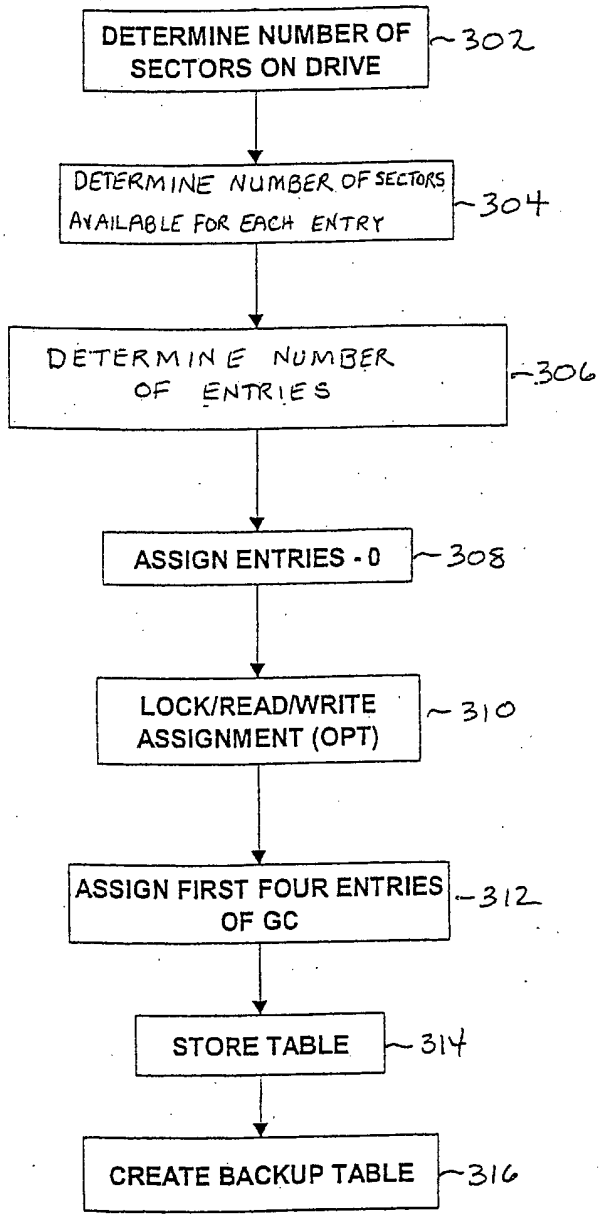
DETERMINE NUMBER OF SECTORS ON DRIVE
302
DETERMINE NUMBER OF SECTORS AVAILABLE FOR EACH ENTRY
304
DETERMINE NUMBER OF ENTRIES
306
ASSIGN ENTRIES - 0
308
LOCK/READ/WRITE ASSIGNMENT (OPT)
310
ASSIGN FIRST FOUR ENTRIES OF GC
312
STORE TABLE
314
CREATE BACKUP TABLE
316

FIG. 3

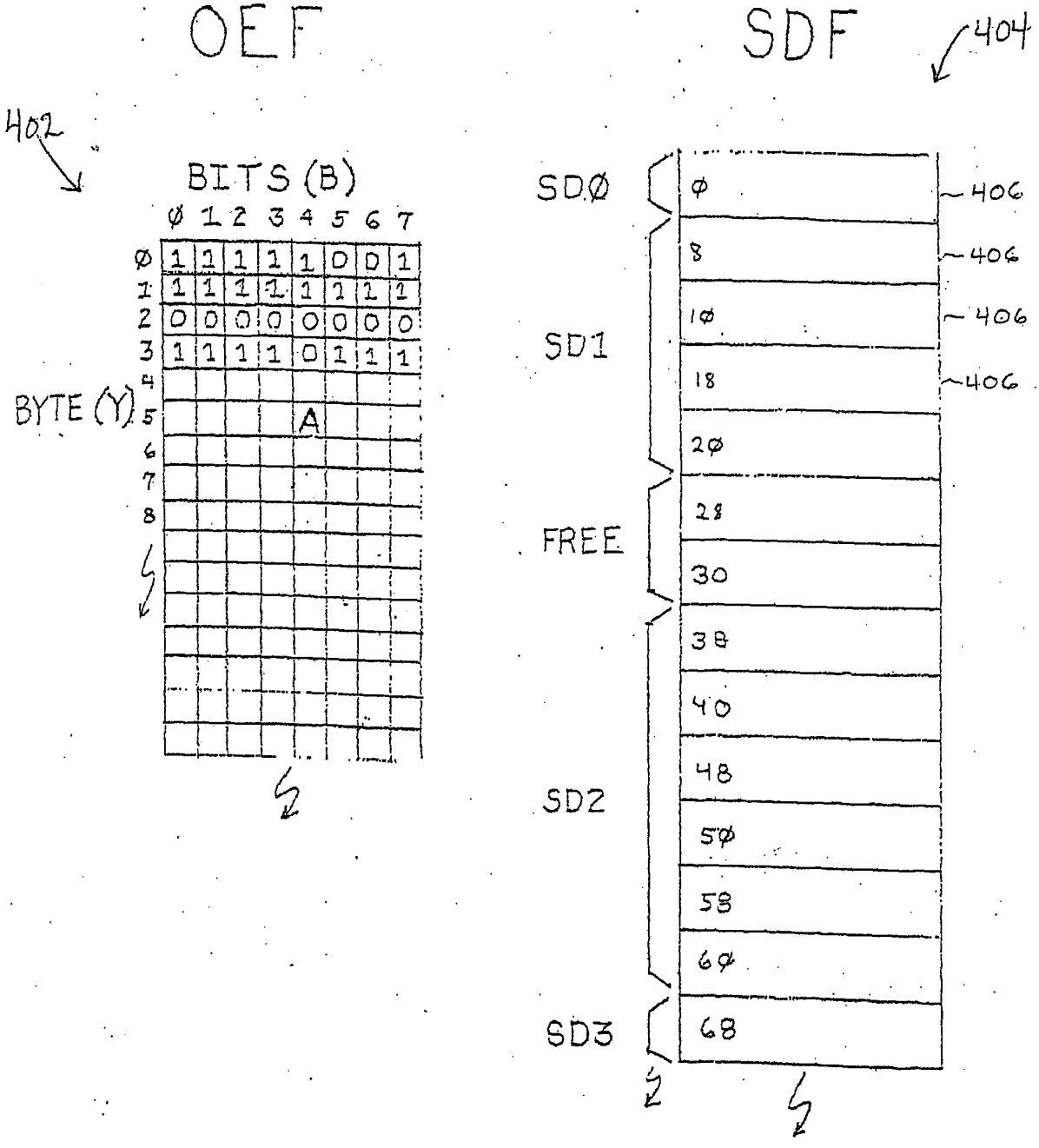
OEF
SDF
404
402
BITS (B)
Ø 1 2 3 4 5 6 7
Ø 1 1 1 1 1 0 0 1
1 1 1 1 1 1 1 1 1
2 0 0 0 0 0 0 0 0
3 1 1 1 1 0 1 1 1
BYTE (Y)
A
SDØ
SD1
FREE
SD2
SD3
Ø
8
1Ø
18
2Ø
28
3Ø
38
4Ø
48
5Ø
58
6Ø
68
406
406
406
406

FIG. 4

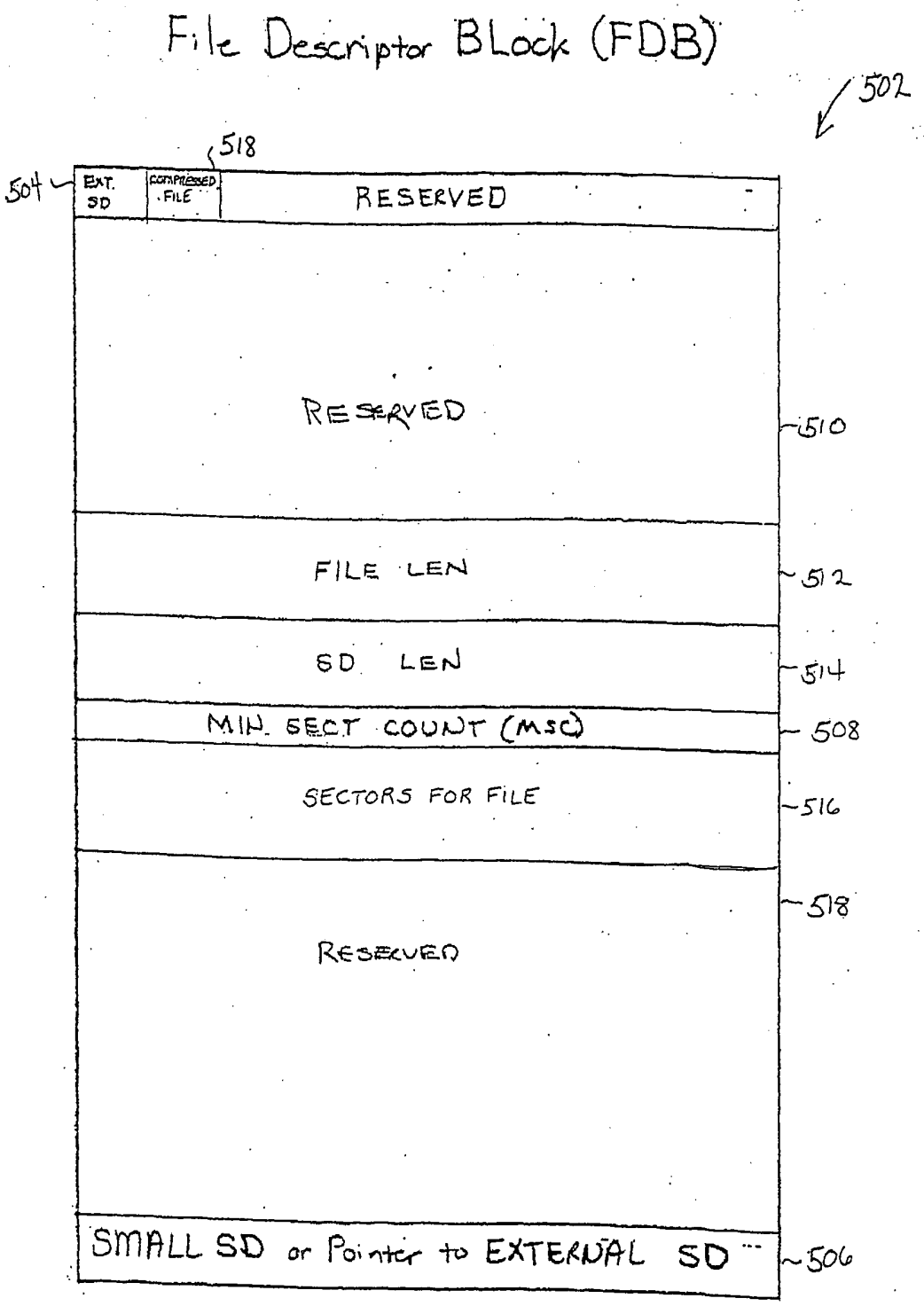
File Descriptor BLock (FDB)
502
518
504
EXT. SD
COMPRESSED FILE
RESERVED
RESERVED
510
FILE LEN
512
SD LEN
514
MIN. SECT COUNT (MSC)
508
SECTORS FOR FILE
516
518
RESERVED
SMALL SD or Pointer to EXTERNAL SD
506

FIG.5

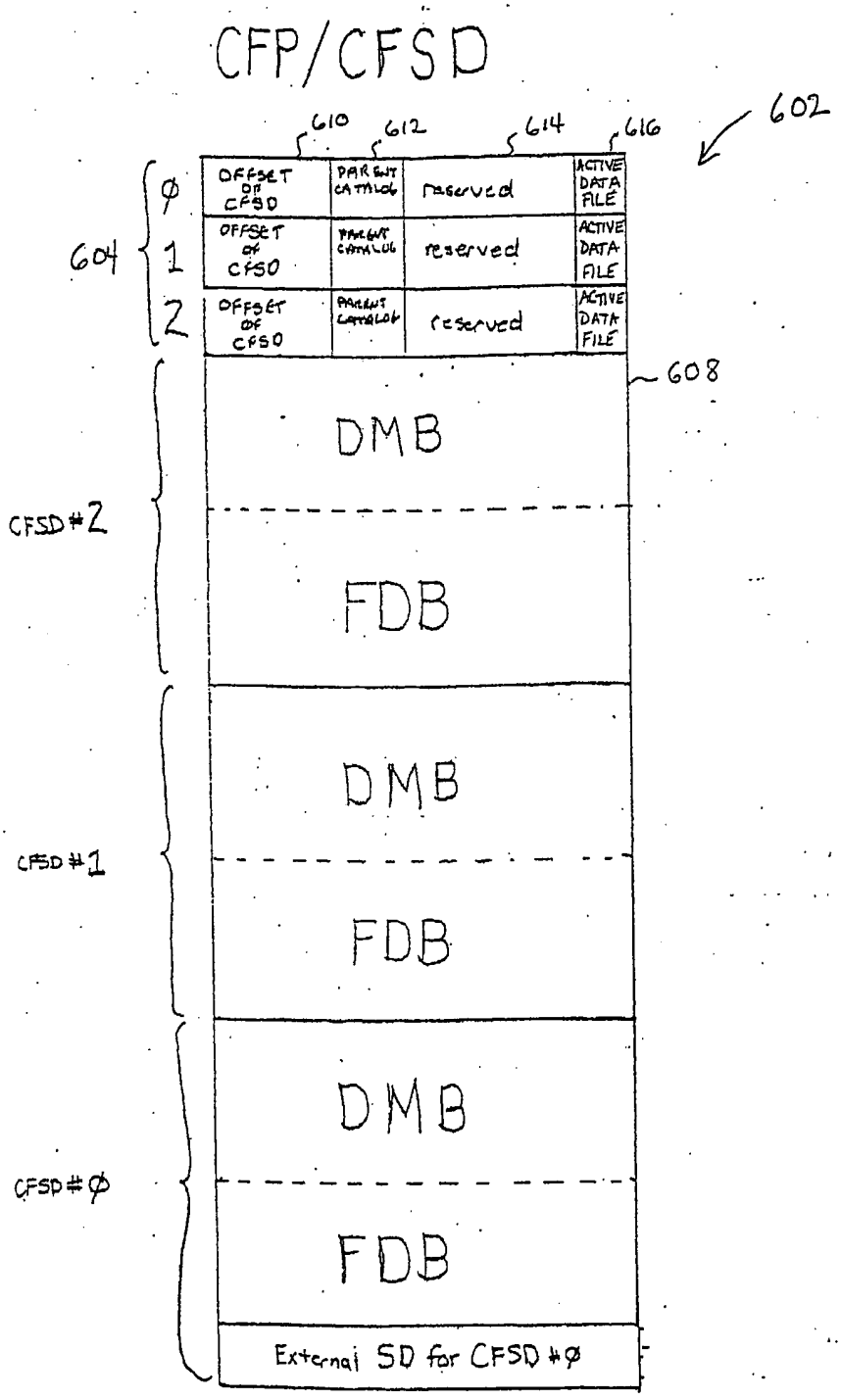
CFP/CFSD
602
610
612
614
616
604
0
1
2
OFFSET OF CFSD
PARENT CATALOG
reserved
ACTIVE DATA FILE
608
DMB
FDB
CFSD#2
CFSD#1
CFSD#0
External SD for CFSD #0

FIG. 6

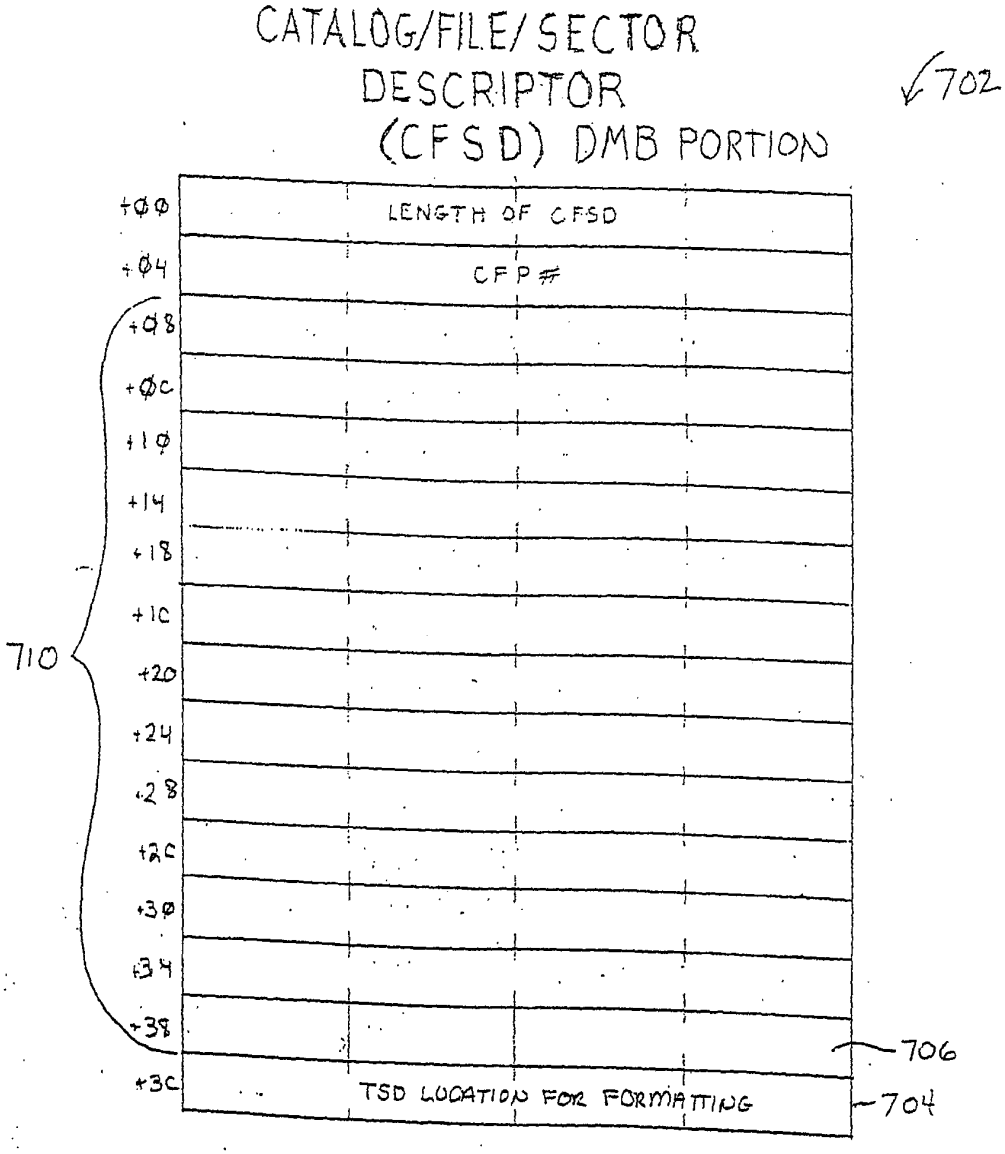
CATALOG/FILE/SECTOR
DESCRIPTOR
(CFSD) DMB PORTION
702
+00
+04
+08
+0C
+10
+14
+18
+1C
+20
+24
+28
+2C
+30
+34
+38
+3C
LENGTH OF CFSD
CFP #
TSD LOCATION FOR FORMATTING
710
706
704

FIG. 7

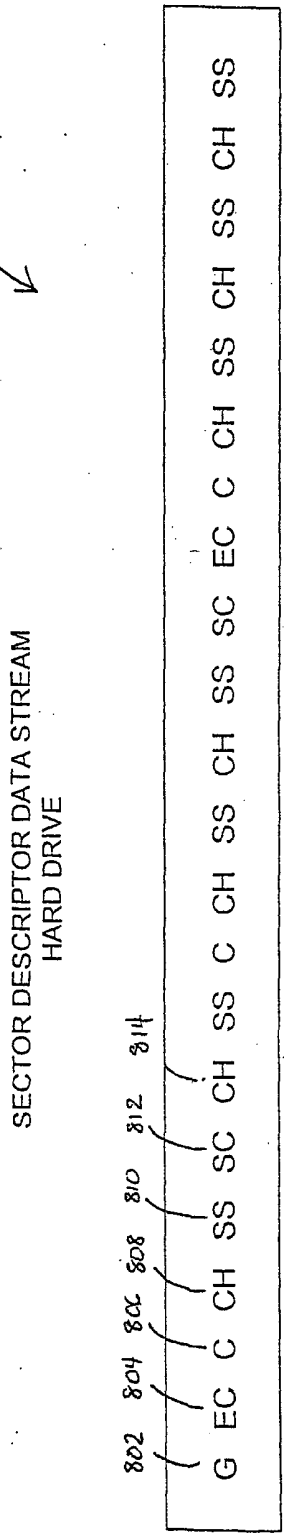
800
SECTOR DESCRIPTOR DATA STREAM
HARD DRIVE
G EC C CH SS SC CH SS C CH SS SC EC C CH SS CH SS CH SS
802
804
806
808
810
812
814

FIG. 8

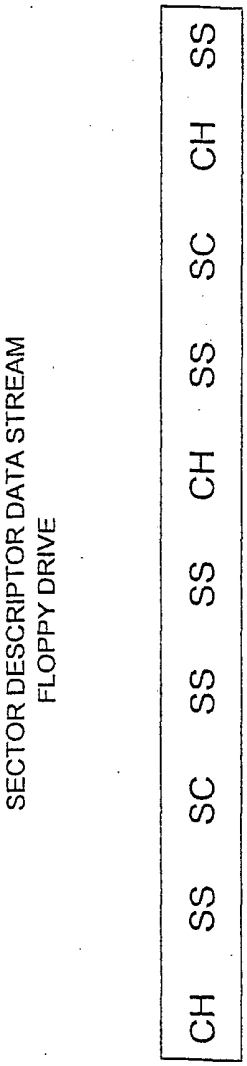
SECTOR DESCRIPTOR DATA STREAM
FLOPPY DRIVE
CH SS SC SS SS CH SS SC CH SS

FIG. 9

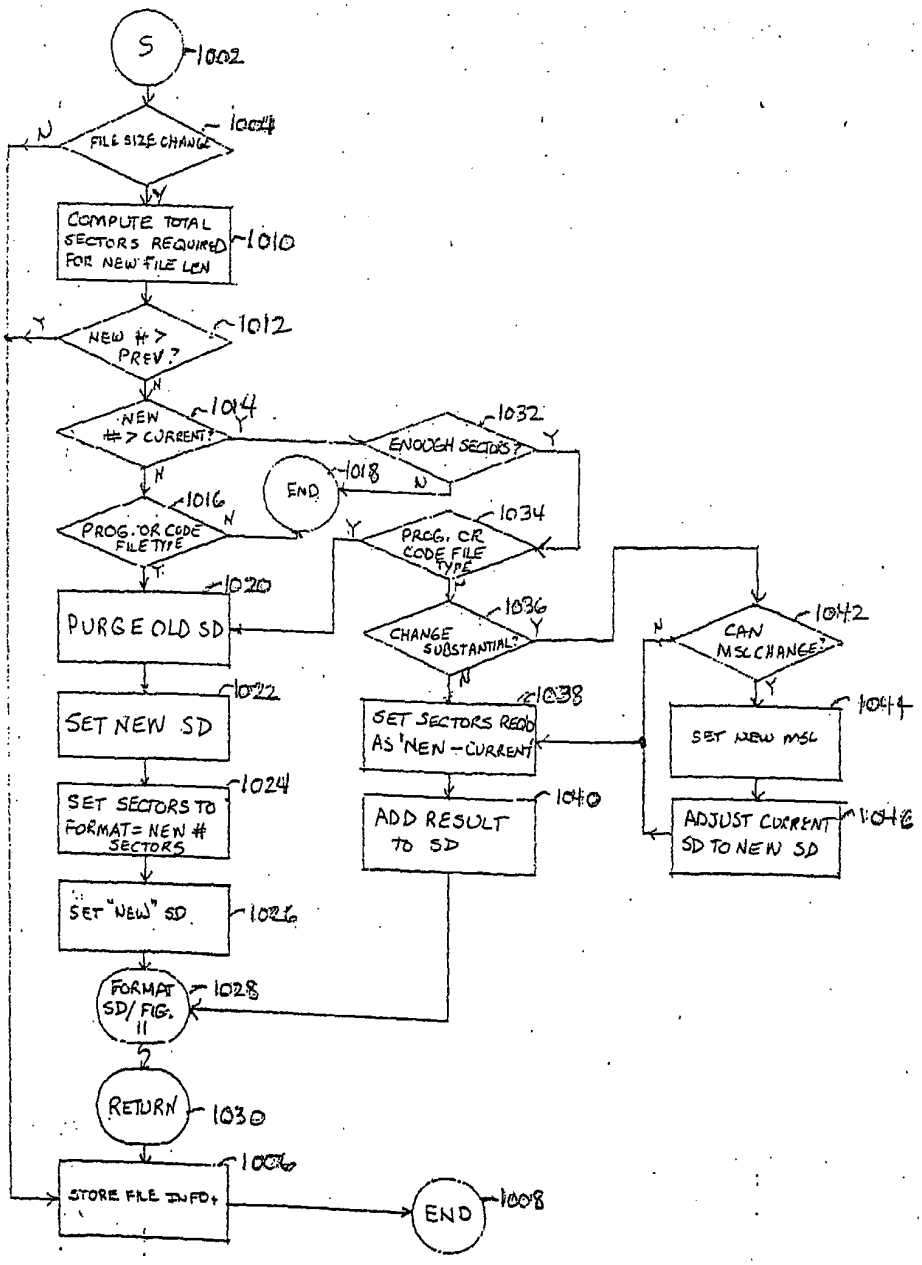
S
1002
FILE SIZE CHANGE
1004
N
Y
COMPUTE TOTAL SECTORS REQUIRED FOR NEW FILE LEN
1010
NEW # > PREV?
1012
Y
N
NEW # > CURRENT?
1014
Y
N
ENOUGH SECTORS?
1032
Y
N
END
1018
PROG. OR CODE FILE TYPE
1016
N
Y
PROG. OR CODE FILE TYPE
1034
PURGE OLD SD
1020
CHANGE SUBSTANTIAL?
1036
Y
N
CAN MSL CHANGE?
1042
N
Y
SET NEW SD
1022
SET SECTORS REQD AS 'NEW - CURRENT
1038
SET NEW MSL
1044
SET SECTORS TO FORMAT = NEW # SECTORS
1024
ADD RESULT TO SD
1040
ADJUST CURRENT SD TO NEW SD
1046
SET "NEW" SD
1026
FORMAT SD/FIG. 11
1028
RETURN
1030
STORE FILE INFO
1006
END
1008

FIG. 10

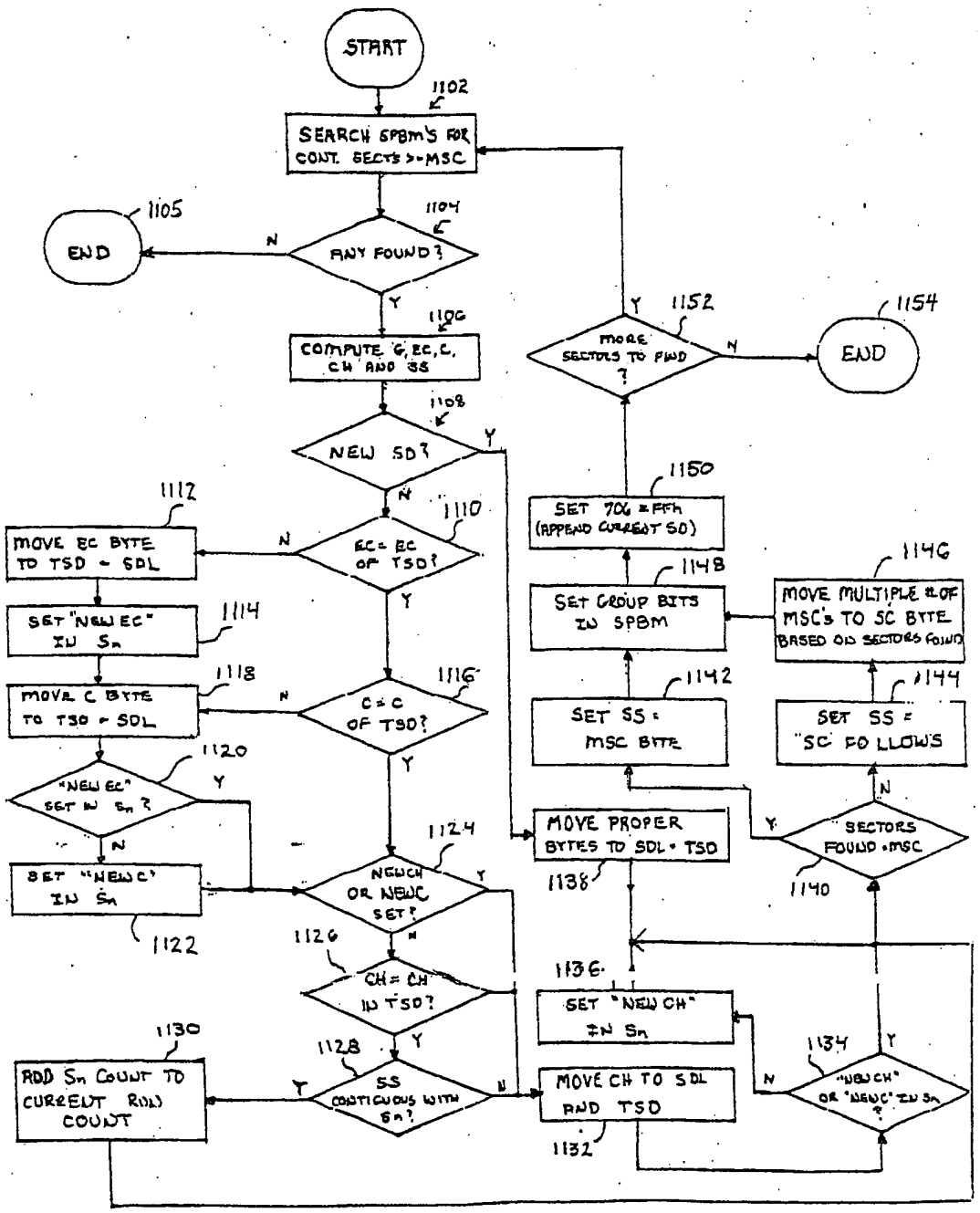
START
1102
SEARCH SPBM'S FOR CONT. SECTS >= MSC
1104
ANY FOUND?
N
1105
END
Y
1106
COMPUTE G, EC, C, CH AND SS
1108
NEW SD?
Y
N
1110
EC = EC OF TSD?
N
1112
MOVE EC BYTE TO TSD + SDL
Y
1114
SET "NEW EC" IN Sn
1116
C = C OF TSD?
N
1118
MOVE C BYTE TO TSD + SDL
Y
1120
"NEW EC" SET IN Sn?
Y
N
1122
SET "NEW C" IN Sn
1124
NEW CH OR NEW C SET?
Y
N
1126
CH = CH IN TSD?
Y
1128
SS CONTIGUOUS WITH Sn?
Y
N
1130
ADD Sn COUNT TO CURRENT RUN COUNT
1132
MOVE CH TO SDL AND TSD
1134
"NEW CH" OR "NEW C" IN Sn?
Y
N
1136
SET "NEW CH" IN Sn
1138
MOVE PROPER BYTES TO SDL + TSD
1140
SECTORS FOUND = MSC
Y
N
1142
SET SS = MSC BYTE
1144
SET SS = "SC" FOLLOWS
1146
MOVE MULTIPLE # OF MSC'S TO SC BYTE BASED ON SECTORS FOUND
1148
SET GROUP BITS IN SPBM
1150
SET 70h = FFh (APPEND CURRENT SD)
1152
MORE SECTORS TO FIND?
Y
N
1154
END

FIG 11

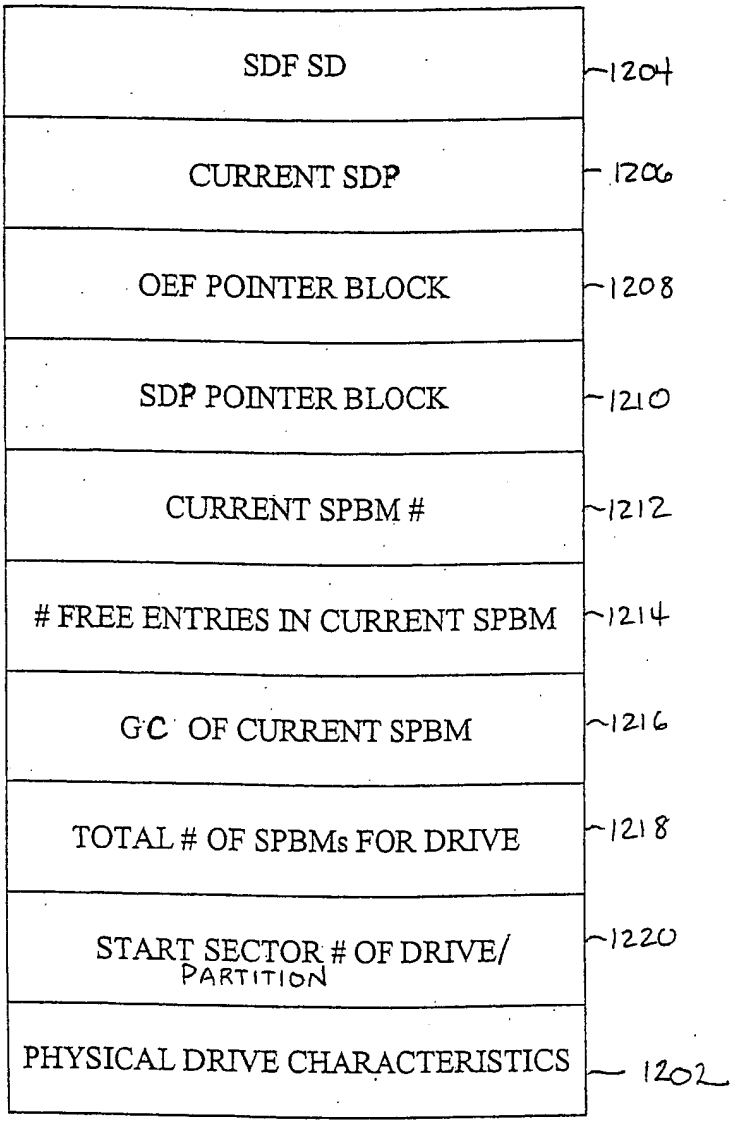
SDF SD
1204
CURRENT SDP
1206
OEF POINTER BLOCK
1208
SDP POINTER BLOCK
1210
CURRENT SPBM #
1212
FREE ENTRIES IN CURRENT SPBM
1214
GC OF CURRENT SPBM
1216
TOTAL # OF SPBMs FOR DRIVE
1218
START SECTOR # OF DRIVE/ PARTITION
1220
PHYSICAL DRIVE CHARACTERISTICS
1202
1200

FIG. 12